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ABSTRACT

The world is in crisis, and the future survival of humankind is in question. Technology encourages communication in terms of speed and efficiency, and it is the task of educators to rediscover alternative languages. While the global crises of peace, the environment, the economy, and education are prominent, the opportunities are also great if understanding can be achieved of what these mean in terms of educating for a more peaceful future. For teachers it will mean enlarging perspectives from the national frame of reference to the global. This implies that teachers need to face up to the planetary crises without becoming overwhelmed; that the concept of security needs to be broadened to include economic and environmental, as well as national, security; and that the old habits of domination must be thrust aside to make room for a new emphasis on humanity. Modifications in curicula in response to the global crises include shifting from specialized to integrated knowledge and from passive to active learning; honoring narrative understanding; learning social responsibility; and cultivating agreements in everyday life. The realization that all humankind is together on this planet, with a shared future, must come: the future of the planet cannot be controlled by one voice imposing a solution. (KM)

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"A 'Race' Between Education and Disaster: Curriculum for the Survival of the Species"

an invited paper presented at
Curriculum at the Centre
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The "Race" Between Education and Disaster.

"The violence of speed has become both the location and the law, the world's destiny and its destination."
- Paul Virilo, *Speed and Politics* (1977)

Introduction.

My talk is about the earth as an endangered planet and what this means for curriculum and instruction in the 1990s and beyond. The title for the talk -- **A Race Between Education and Disaster: Curriculum for the Survival of the Species** -- was assigned to me. I did not choose this title. Nor is it a title that I likely would have chosen had I been asked to suggest one. But I certainly support the intention behind this title, which is to convey the message that humanity finds itself in jeopardy as we enter the closing decade of this century. We need only to pick up the newspaper or turn on the television to be aware that the future survival of the species is in question. News of environmental damage, new weapons development, and financial crises reaches us daily. I also support the second part of the title, "a curriculum for the survival of the species". It suggests that the dangerous condition of the planet has important implications for schools and for what we do as educators. The young people in our classrooms know about these problems too. They also read the papers and watch television. Surveys conducted here in Canada and elsewhere show that many of them are quite pessimistic about the future.[1] So, I congratulate the planners of this conference on curriculum,

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[1] For a Canadian example see Parker, R and Parker, V. (1987) Please listen: Canadian children's concerns and education, *Canadian Peace Education News* 1(2) 1-2. One British example is Davies R., *Hopes and Fears: Children's Attitudes to Nuclear War*, Lancaster: Centre for Peace Studies.

instruction and leadership for having the foresight to include theme on the programme.

So, why do I question the title -- "a race between education and disaster: curriculum for the survival of the species" -- if I am in agreement with the intention and the direction it expresses? I underline the word race in the title and I ask you this: is this, in fact, a race? If so, what kind of a race is it? Is it speed race, where education has to run to catch up with technological change and its attendant environmental and social dislocations? What chance does education have in this kind of race when weapons technology has moved from subsonic, to supersonic, and now (with lasers) to the speed of light all in a little more than forty years? If not this kind of race, can there be a race of a different kind, one that is not a speed race? I have trouble of thinking of such a one.

The problem is we lack the language to speak in other ways. We live in a culture that is saturated by technology. Technology encourages us to speak in the language of speed and efficiency, because speed and efficiency are the basic values of technology. It is this narrowing down of human possibilities to these dominant values that lies at the source of our problem. The task for education is to rediscover the other languages which will allow us to speak and to think differently as educators.

In his book, *Speed and Politics*,[1] Paul Virilo talks about modern warfare and politics. He notes that today the wars are over time, not territory. If the siege gun and the fortress were the weapons in the wars over territory, the weapons of the war over time are the means of communicating destruction (the computer, telecommunications). By way of

[1]Virilo, P. (1986) Speed and Politics: An Essay on Dromology, New York: Semiotext(e) translated from French by M. Politzzotti.

example he points to the Six Day War in 1967. During this conflict the Israelis attacked an American reconnaissance ship the *Liberty*. President Johnson used the telephone hot line to warn the Soviets that the American carrier based planes were being dispatched against Israel. Because both the Russians and Americans were glued to their radar screens, the Americans had to let the Soviets know about their intentions. The American president had the time to send a message then, but since that crisis a technologically driven arms race has pushed the margin for political decision making still narrower. Virilo concludes that we now stand on the "threshold where the possibilities for properly human political action will [soon] disappear in a 'State of Emergency' (143).

The message here for educators is a double one. We find ourselves in a planetary crisis. But we ought not to be caught up in the panic of a state of emergency. Our challenge and the challenge for curriculum and instruction is to search for different ways of speaking, to try and recover and foster those languages that will enable us to talk about our lives together with children, in schools, and as a community of people. To paraphrase Virilo, we need to ask ourselves this: what is properly human educational action that is required of us at this time?

This is how I prefer to approach the topic. I will begin with a story. It's the story I tell myself about how I came to be interested in peace studies, not as an expert in arms control and disarmament, but as someone who is involved in social studies teacher education and who is concerned about curriculum change. I will then discuss some important aspects of the present global crisis which we, as educators, urgently need to address. I will conclude by making some suggestions about the sorts of changes we need to make in curriculum and teaching to respond appropriately to this

profound crisis. In making these suggestions I would like you to think to these as ways of counteracting panic. By enhancing opportunities for talking, writing, thinking, and the appreciation of beauty, we might yet restore human action and free ourselves from the tyranny of speed. The survival of the species rests on rethinking and reorienting humanity's place in the world.

My Interest in Peace Education.

I begin then with my own story. As I look back, my interest in educating for a more peaceful and humane future comes partly from my background as a social studies teacher in Newfoundland. History, geography and contemporary world problems are the stock and trade of social studies teaching. When I began teaching back in the late 1960s the Newfoundland social studies curriculum was a traditional history and geography programme. But even then this narrow emphasis was being questioned and several alternative pilot courses on contemporary issues were launched. I became involved in teaching one called "World Problems". The course consisted of an amalgam of Twentieth Century historical and social issues including a section on global economic development. As the students and I studied the economic disparities and the conditions facing the Third World I wondered what can we do? The class raised some money and gave it to the Canadian Catholic Organization for Development and Peace. This provided a positive channel for our concerns and we became better informed about the issues as we learned about this organization's philosophy of peace through development. But I also remember how easily many students become discouraged. They would ask, "what can I really do as one person in the face of so much suffering and injustice?" And then there were the "realists", who regarded this poverty

far away as someone else's problem. Were they uncaring or realistic? I didn't know for sure then. But I came to realize, as a teacher, that it was much easier to raise concerns about peace and development, than it is to engender hope and meaningful long term commitments.

My second, and more sustained engagement with educating for peace began in the early 1980s. This came about as a result of a confluence of two events. One was a round about route through my interest in the problem of curriculum change. In looking at existing views and practices on inservice education and curriculum implementation, I began to wonder how is it that most well-intentioned change efforts always seem to lead to further controlling teachers' work. I asked, is there a way of helping schools to change that will both empower teachers to make necessary changes their own practice and yet be sensitive to the quality of their work lives? The other event was a direct concern with the global political situation. The arms race and Soviet-American relations were taking a dangerous turn at the same time. I was among the many who began to feel the palpable threat of nuclear war. Suddenly the future could no longer be taken for granted. You will recall that in June 1982 one million people marched for peace in the streets of New York City at the opening of the Second United Nations Special Session on Disarmament.

And so, as I took up my new work in social studies teacher education at the university, I wondered: what can be done to help educate for a more peaceful future, and how might teachers be empowered to do this? I don't think that I was unusual in combining my professional interests with a concern for peace. We know of physicians who have become involved because they see the arms race and, now, environmental problems as important issues in preventative public health. We are acquainted with

farmers who are active in the environmental movement. We see lawyers becoming interested in global human rights questions. In many walks of life there are people who are combining their private and public lives around peace concerns.

The Crises We Face.

As I think about my own involvement I am convinced that peace education is not just a matter for experts in arms control, the environment, or development. It is a gathering together of people concerned about the future of the community and the planet.

Future survival is put into question because we now live in a world in crisis. Four sharp images may serve to remind us of some of the dimensions of the crisis:

Image #1 - Hiroshima.

My first image is perhaps not the usual one we have in mind when we think of this Japanese city of 400,000 people destroyed by the atomic bomb in 1945. It is of Fr. Pedro Arrupe, a Jesuit priest and doctor living not far from Hiroshima on August 6,1945. Shortly after eight o'clock in the morning he becomes aware of the shattering atomic blast some distance away. Looking up he notices that the clock on the wall has stopped at the exact moment of the explosion. Reflecting on this some years later he writes: "For me that silent and motionless clock has become a symbol. The explosion of the first atomic bomb has become a para-historical phenomenon. It is not a memory, it is a perpetual experience, outside history which does not pass with the ticking of the clock. The pendulum stopped and Hiroshima has remained engraved on my mind."

Image #2 - The Brazilian Rainforest.

The second image is of the Brazilian rainforest in flames. In the foreground is the bare reddish earth where the towering trees and rich green undergrowth once were. This land is being prepared for cattle raising and for small farms. Everywhere there are signs that human settlement is pushing back the trees. Roads now criss-cross this land, making it accessible for people. We know that the rainforest covers only 7% of the earth's surface, but is home to at least 50% of the planet's species. We also know that these trees are a vital source of oxygen and that

their burning adds to the carbon dioxide in the atmosphere that is already rapidly increasing because of our use of fossil fuels around the world. Yet in one Brazilian province one-fifth of all of the rain forest has already been destroyed. [1]

Image #3 - The Zambian Copperbelt.
A third image is from the Copperbelt in Zambia. In 1986 there are food riots in the mining town of Kitwe. The riots begin when the many urban poor learn that there will be a 120% increase in the price of their staple food, maize meal. The people attack and loot the food stores. The riot is an explosion of frustration, the result of nearly 20 years of declining wages and rising prices. This has happened because the country depends on copper for 80% of its foreign earnings. Since the 1970s the price of copper has declined on the world market. At the same time the cost of imports, particularly oil and manufactured goods have climbed. Caught in this squeeze between the declining value of exports and increasing cost of imports, Zambia's foreign debt has grown to $5 billion. As a condition for rescheduling loan repayments, the International Monetary Fund imposed very strict austerity measures which led to the price rises. [2]

Image #4 - Ingrid, A Canadian High School Student.
The fourth image is of a Canadian high school student from Winnipeg. Ingrid is graduating and getting ready to face the future. As she prepares for her graduation she compares her prospects with those of the generation that went before her. She says that times are harder now both socially and economically. Young people have to worry about family break up, the dangers of drugs, as well as unemployment and the cost of living. With these near at hand concerns, the wider issues of peace and planetary survival seem to have little relevance. She reports that her high school curriculum exposed her to the problems of nuclear war, hunger, racism, and environmental pollution, but there has been little discussion on how to deal with them. She concludes her reflections by saying that the combination of powerlessness in the face of the global issues and harder economic and social circumstances, tend to make many teenagers want to live only for today. [3]

What are we to make of these four images? They indicate four important dimensions of a world in crisis. In many ways the first image, of

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[1] *Time Magazine*, January 2, 1989, pp. 26-33
[2] *The New Internationalist*, November, 1988, p. 21
[3] *Macleans Magazine*, September 7, 1987, p.45

Hiroshima, is the central one. Hiroshima stands as a symbol of the crisis of modernism. Modern science and technology has understood and mastered the power of nature to such an extent that it can unleash the energy locked within atomic matter to destroy a city. And yet it is this same science and technology that has rebuilt Hiroshima and the other Japanese cities into the economically advanced industrial giants that they are today. Einstein said that the atomic bomb has changed everything but human nature. Forty-four years later it may be that we are beginning to understand the meaning of the atomic bomb. As the superpowers pull back from the brink of nuclear confrontation, there seems to be growing awareness that we indeed crossed a historical watershed with the experience of Hiroshima and Nagasaki. But we are still face with the critical question of how to act differently. We know that we have the technical power to end life on earth in a flash, but how do we live at peace and in harmony with one another without the ruinous costs of defence built on military deterrence. This points to the far deeper and still unresolved crisis of the human sciences and social organization.

The image of the burning rainforest is a reminder that the planet itself has environmental limits. The global warming caused by the trapping of the suns rays by excessive levels of carbon dioxide, is only one sign that we have surpassed these limits. In the past 80 years the population of the earth has increased three-fold, but consumption has increased by 20 times. A multitude of international reports, including the important Brundtland Commission Report indicate that the next fifteen years will be crucial in reversing this trend. This is the planetary ecological crisis.

The picture of the food riot is a sharp recollection of the devastating effects of the Third World debt problem and what this represents about the

conditions of life for many people. The debt problem is but a symptom of the deeper problem of the global economic imbalance between the rich North and the poor South. The North with 25% of the population consumes 80% of the earth's resources, while the South with 75% of the population uses only 20%. The concentration of wealth is worsening, and as it worsens the social and political tensions deepen into a global economic crisis.

The economic and ecological crises are linked too. For many poor countries the environment is being sacrificed to get much needed foreign capital and industries. New farm land and ranch land is opened up for development to feed a desperate population. Their unhappy choice between development and the environment is resulting in the downward slide of both.

It is small wonder then that the fourth image is one of a pessimistic graduating student. There is much that seems beyond our power. And yet here lies our challenge as teachers: we cannot afford to be pessimistic! Without a hopeful vision of the future, pedagogy loses its direction. So this is what I ask you: How do we as educators foster our own hope and optimism so as to inspire others to face the difficult questions and to respond meaningfully and responsibly? And this involves more than just a personal hope and commitment. We also need different teaching priorities, new understandings and different competencies that will lend credence to this hope. This is the crisis of education today.

Rather than being left in a state of panic we need to pause to ask ourselves what do these four faces of the global crisis really mean for us? Surely as educators we cannot realistically expect to have very much impact on militarism, environmental damage, or the third world debt problem. Even facing the crisis in education will take some time. But again

we find ourselves limited by language. We often take the meaning of crisis to imply that we have to act quickly to avert disaster. But in Chinese the character for crisis is "ji". Ji has a double meaning....it means both crisis and opportunity. Even the Greek entymological roots of the word crisis -- meaning a judgement or a time for decision -- is much broader. Neither imply that a crisis is a race to avoid disaster.

So, the global crises of peace, the environment, the economy, and education are critical, but the opportunities are also great if we can understand what these mean in terms of educating for a more peaceful future. There are opportunities for change and for building a more peaceful world. This much, at least, is clear: we have reached a turning point and cannot continue business as usual, nor can we simply appeal for a more rigorous attention to what have been formerly called " the basics". There are quite different understandings, skills and attitudes now required for building a more peaceful future.

Because it is imperative that we change our present ways, there are no ready made blueprints that will inevitably lead us out of this crisis. We can point only to promising directions which seem to come to grips with the questions facing us, and which will enable us to learn to live together, in peace, in a world with environmental limits.

In my view there are two kinds of directions in which we may move. One directions relates to changing our perspectives as teachers, the other relates to changes in the curriculum.

Implications for Teaching.

For teachers it will mean enlarging our perspectives from provincial and national frames of reference, to a global frame. Thinking globally implies the following:

1. An Appreciation of the Planetary Crisis. Teachers need to face up to the planetary crisis without being overwhelmed by it. It is easy to become numbed by the many real and anticipated disasters that are presented one after the other in fragmented media images. Behind the headlines there lurks the linkages between the environment, development and peace. These linkages provide clues about both the extent and the sources of the problems. In the past there has been a reliance on technological solutions to economic development, peace and security, etc. By their very nature, technological solutions approach problems discretely. For example, a forestry project may be undertaken to provide jobs and to develop a resource. The costs are measured in short-run terms of that particular project, not in the long term environmental costs. Or, peace is viewed as a specific security problem to be resolved by a new weapons system. The costs of the arms race and the militarization of the economy are not considered. We are now being asked to set aside this technological mind-set and to reassess our role as a human species living with the planet, rather than being the highly successful exploiters of the world.

2. Developing New Conceptions of Security. All people have a basic requirement for security. Conventionally, security is thought of in terms of defence, particularly a national defence. This thinking now needs to be broadened to include other dimensions of security. Security of life is the most basic. Not only is their very physical survival in jeopardy for many people in the South, but their future prospects are also dimming. They are caught in a vicious cycle of economic desperation and environmental damage, in what the Brundtland Commission has called "the downward spiral of linked ecological and economic decline". The huge foreign debts of the South nations and a desperate search for export earnings cause more

and more land to be cultivated for cash crops. The small farmers are forced to clear more marginal lands to survive, or move into the cities to try and eke out a living there. So we must begin to think about security in economic and environmental terms too.

Less obvious, but significant all the same, is social and cultural survival. This is the source of a good deal of insecurity today, in both the North and South, as traditional values and social arrangements feel themselves under threat. And national security too must continue to be extremely important, because nations under threat suppress human rights internally and resort to military means to ensure their defence.

3. Hearing the Voices of the Voiceless. The report of the World Commission on Environment and Development, chaired by the prime minister of Norway Gro Harlem Brundtland, is entitled *Our Common Future*.[1] This title sharply focuses the reason for having a global frame of reference - we are together on one planet, sharing one future. But this also suggests that the future is not to be controlled by one voice imposing a solution. Much of what we reap today as problems with the environment, maldevelopment and an absence of peace has been sown by the solutions of the past, solutions devised by a few experts claiming to speak for all. We need only to look at the failure of the so-called "Green Revolution" to see an example of this. The Brundtland Report calls attention to the need for a different international order which is based upon hearing the many voices, North and South building a sustainable development. Such an approach puts aside old habits of domination, placing fresh emphasis on humanity

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[1] Brundtland, G. (1987) *Our Common Future: The World Commission on Environment and Development*, Oxford: Oxford University Press.

understanding its rightful place in the world. Truly global thinking means that we genuinely listen to other cultures and peoples, thus learning to live with our differences.

Implications for the Curriculum.

The implications of the global crisis for the curriculum are also far reaching. They will involve some fundamental changes in how we think about curriculum. Over the past fifty years or so we have come to regard a curriculum as a fixed document to be interpreted and implemented by teachers. We have emphasized planning, and have adopted the language of management (the specification of objectives, defining the strategies and resources necessary for reaching these, and developing appropriate evaluation techniques for measuring results). But this is a mistaken idea of planning, regarding it as a way of ordering and controlling events, wanting to remove the surprises. This not only deforms education, which inevitably involves unpredictable growth and change, but it also misreads the curricular implications of the present global crisis which is better understood by its insistent questions rather than any clearly defined ends and means. Thus, we have to learn to think of the curriculum more as a guide that will open up possibilities enabling learning. These possibilities are realized in the dynamic and creative interaction that takes place in classrooms.

Substantively, I think we can identify five shifts in emphasis in curicula that will respond to the global crisis:

1. A Shift from Specialized to Integrated Knowing - Technical knowledge places a high value on expertise and specialization. This kind of knowledge is, no doubt, important in many areas. The subject centred school curriculum, teacher specialization in the secondary school etc. all

reflect this emphasis. But education for a peaceful and sustainable future requires that knowing is integrated across traditional subject boundaries, and that expert knowledge is balanced with an understanding of relationships. This is already beginning to occur in some subject areas. In science education , for example, we have the development of science, technology and society courses. Social studies is beginning to take a greater account of environmental education. Both social studies and environmental education are, in themselves, integrations of traditional disciplines.

2. *From Passive to Active Learning* - Many educational practices are based upon the assumption that one learns first and then applies this knowledge later. Education for a peaceful future places importance on linking knowing and doing. Simply knowing about a problem will not necessarily lead to doing something about it. At the same time a good deal of knowledge can be gathered in the process of actively working on a problem. Active learning also tends to shift emphasis in the learning process to teacher and student learning together, as opposed to a "top down" teacher to student mode.

3. *Honouring Narrative Understanding* - Narrative understanding opens the power of stories as ways of knowing. The global crisis requires that we reassess our place as inhabitants of the world, moving away from relations of control to developing harmonious relationships. The telling of stories are ways of opening us to the many voices and the multiple layers of experience. Stories, originally just told orally, are now being told eloquently through literature, film, and in conversation. Viewing a film like *Children of Debt*, for example, which tells the story of Third World debt very simply through the experiences of Latin American children, produces an immediacy of understanding. As I watch such a film I am

moved to ask the same question that the parents of these children ask -- where has all this money gone? Narration is the natural way for people to express themselves and hearing their stories regrounds us in the human experience and opens the possibility for interrogating that experience.

4. Learning Social Responsibility - This is a fairly simple and direct point about the nature of education as a moral and a political enterprise. As the old saying goes "if you are not part of the solution, you are a part of the problem". We need to appreciate that curriculum and teaching has to always reflect an awareness of itself and how it is dealing with the global crisis.

5. Cultivating Agreements in Everyday Life - The necessity for building the capacity for cultivating agreements is clear. Although this may seem to be an obvious idea, this has not been an explicit goal. In fact, most teaching practices begin from the unspoken assumption that conflict and individual self-interest is the natural way of the world. Over fifty years ago Maria Montessori noted this dominant tendency in education. In a speech made in 1937 at the height of the fascist and Nazi ascendency in Europe she remarked:

> Education...encourages individuals to go their own way and pursue their own personal interests. School children are taught not to help one another, not to prompt their classmates who don't know the answers, but to concern themselves only with getting promoted at the end of the year and to win prizes in competition with fellow pupils. And these poor selfish little creatures, who experimental psychology has proved are mentally exhausted, find themselves in later life like separate grains of sand in the desert; each one is isolated from his neighbour, and all of them are barren. If a storm comes up, these little human particles possessed

> of no life-giving spirituality are caught up in the gusts and form a deadly whirlwind. [1]

The capacity for cultivating agreements requires being able to communicate with "the other side", learning habits of cooperation, and developing the associated skills as explicit curriculum goals guiding classroom practice.

In Concluding.

In concluding I would like to turn again to the image of the race. We can hardly travel very fast if we are not yet sure of our directions. We must first learn to travel well. What we experience chiefly today is our own finitude in the face of an infinitely complex and interdependent world. The realization that the earth is not ultimately under our control and can no longer support endless growth is the realization that things are not as we had assumed them to be. The experience of misunderstanding is the first step in understanding. We begin from here, and from the acknowledgement that this world in crisis is the only world we have. Now we must move forward in solidarity and in conversation with those who dwell with us on this fragile planet.

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[1] From an address entitled "Educate for Peace" given in Copenhagen, May 22, 1937. This is printed in a collection of her works on peace education entitled *Education and Peace*, trans. Helen Lane Chicago: Henry Regnery, 1972, p.34.